

1 **(April 5, 2004)**

2 **Masonry Noise Barrier Walls**

3 Concrete masonry units (CMU's) shall conform to ASTM C 90, Grade N, Type 1.  
4 Concrete masonry units shall have a density between 6.24 and 7.18 kilograms per cubic  
5 meter. Shrinkage shall not exceed 0.065 percent.  
6

7 CMU's will be accepted based on submittal to the Engineer of a Manufacturer's  
8 Certificate of Compliance conforming to Section 1-06.3. The Manufacturer's Certificate  
9 of Compliance shall include test results, conducted within the previous twelve months,  
10 as required to document compliance with the material requirements specified in these  
11 Special Provisions.  
12

13 The concrete masonry unit faces shall be nominal 205 mm by 405 mm with thicknesses  
14 as specified in the Plans. Concrete masonry unit surface texture and color shall be as  
15 follows:  
16

17 \*\*\* \$\$1\$\$ \*\*\*  
18

19 Special shapes shall be provided to complete the work as specified in the Plans.  
20

21 The Contractor shall submit four samples of each type of concrete masonry unit block  
22 specified for use on the project to the Engineer for approval.  
23

24 Grout for concrete masonry units shall conform to ASTM C 476 for fine grout, with a six  
25 sack maximum mix and 10 mm aggregate. The grout shall have a minimum 28 day  
26 compressive strength of 14,000 kPa and a slump of 255 mm.  
27

28 Mortar for concrete masonry units shall conform to ASTM C 270, Type S. The color  
29 shall be natural gray. The Contractor shall mix the mortar in a mechanical mixer of one  
30 sack minimum capacity for a minimum of three minutes after all materials have been  
31 added before using the mortar.  
32

33 Masonry sealer shall be selected from one of the following:  
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- 35 1. Baracade Silane 40, manufactured by Tamms.
- 36 2. Masterseal SL40 VOC, manufactured by Master Builders.
- 37 3. Masterseal 340, manufactured by Master Builders.
- 38 4. Siloxane/Silane 20%, manufactured by Symons.  
39

40 The Contractor shall submit two copies of the manufacturer's recommended masonry  
41 sealer application procedure to the Engineer for approval.  
42

43 The parge coating applied to the top of the masonry wall shall be a waterproof cement-  
44 base coating selected from one of the following:  
45

- 46 1. Masterseal 150, manufactured by Master Builders.
- 47 2. Brushbond, manufactured by Chemrex.
- 48 3. Tamoseal, manufactured by Tamms.  
49

50 The sealant system for the vertical expansion joints shall consist of a single component,  
51 gun grade, polyurethane sealant, with a closed cell polyurethane foam backer rod.